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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/839,164

DATE: 01/22/2002
TIME: 17:02:42

Input Set : A:\09839164.txt
Output Set: N:\CRF3\01222002\I839164.raw

SEQUENCE LISTING

ENTERED

4 (1) GENERAL INFORMATION:
6 (i) APPLICANT: KOZLOV, VLADIMIR
7 TSYRLOVA, IRENA
9 (ii) TITLE OF INVENTION: INHIBITOR OF STEM CELL PROLIFERATION AND
10 USES THEREOF
12 (iii) NUMBER OF SEQUENCES: 11
14 (iv) CORRESPONDENCE ADDRESS:
15 (A) ADDRESSEE: NIXON & VANDERHYE P.C.
16 (B) STREET: 1100 NORTH GLEBE ROAD, 8th FLOOR
17 (C) CITY: ARLINGTON
18 (D) STATE: VIRGINIA
19 (E) COUNTRY: U.S.A.
20 (F) ZIP: 22201-4714
22 (v) COMPUTER READABLE FORM:
23 (A) MEDIUM TYPE: 1.44 Mb diskette
24 (B) COMPUTER: IBM PC compatible
25 (C) OPERATING SYSTEM: PC-DOS/MS-DOS
26 (D) SOFTWARE: MS Word
28 (vi) CURRENT APPLICATION DATA:
29 (A) APPLICATION NUMBER: US/09/839,164
C--> 30 (B) FILING DATE: 23-Apr-2001
31 (C) CLASSIFICATION:
45 (vii) PRIOR APPLICATION DATA:
34 (A) APPLICATION NUMBER: US 08/477,668
35 (B) FILING DATE: 07-JUN-1995
38 (A) APPLICATION NUMBER: US 08/316,424
39 (B) FILING DATE: 30-SEP-1994
42 (A) APPLICATION NUMBER: PCT/US94/03349
43 (B) FILING DATE: 29-MAR-1994
46 (A) APPLICATION NUMBER: US 08/040,942
47 (B) FILING DATE: 31-MAR-1993
50 (2) INFORMATION FOR SEQ ID NO: 1:
52 (i) SEQUENCE CHARACTERISTICS:
53 (A) LENGTH: 423 base pairs
54 (B) TYPE: nucleic acid
55 (C) STRANDEDNESS: single
56 (D) TOPOLOGY: linear
58 (ii) MOLECULE TYPE: DNA (cDNA)
60 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

62 GTGCTGTCTC CTGTCAGCAA GACCAACGTC AAGGCCGCTT GGGTAAAGGT CGCGCGCAC 60
64 GCTGGCGAGT ATGGTGGCGA GGGCTTGGAG AGGAATGTTTC TGTCTTCCC CACCAACAG 120
66 ACCTACTTCG CGCACATTGCA CCTGAGCCAC GGCTCTGCC AGGTTAAGGG CCACGGCAAG 180

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68	AAGGTGGCCG	ACGCGCTGAC	CAACGCCGTG	GCGCACGTGG	ACGACATGCC	CAACGCGCTG	240										
70	TCCGCCCTGA	GGCACCTGCA	CGCGCACAAAG	CTTGGGTGGA	ACCCGGTCAA	CTTCAAGCTC	300										
72	CTAACCCACT	GCCTGCTGGT	GACCCCTGGCC	GCCACACTTC	CGCCGAGTT	CACCCCTGCG	360										
74	GTGACAGCCT	CCCTGGACAA	GTTCTTGCTT	TCTGTGAGCA	CGGTGCTGAC	CTCCAAATAC	420										
76	CGT						423										
79	(2)	INFORMATION FOR SEQ ID NO: 2:															
81	(i)	SEQUENCE CHARACTERISTICS:															
82	(A)	LENGTH: 141 amino acids															
83	(B)	TYPE: amino acid															
84	(C)	STRANDEDNESS:															
85	(D)	TOPOLOGY: linear															
87	(ii)	MOLECULE TYPE: peptide															
89	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 2:															
91	Val	Leu	Ser	Pro	Ala	Asp	Lys	Thr	Asn	Val	Lys	Ala	Ala	Trp	Gly	Lys	
92	1				5					10				15			
94	Val	Gly	Ala	His	Ala	Gly	Glu	Tyr	Gly	Ala	Glu	Ala	Leu	Glu	Arg	Met	
95						20				25				30			
97	Phe	Leu	Ser	Phe	Pro	Thr	Thr	Lys	Thr	Tyr	Phe	Pro	His	Phe	Asp	Leu	
98						35			40				45				
100	Ser	His	Gly	Ser	Ala	Gln	Val	Lys	Gly	His	Gly	Lys	Val	Ala	Asp		
101						50			55				60				
103	Ala	Leu	Thr	Asn	Ala	Val	Ala	His	Val	Asp	Asp	Met	Pro	Asn	Ala	Leu	
104						65			70			75			80		
106	Ser	Ala	Leu	Ser	Asp	Leu	His	Ala	His	Lys	Leu	Arg	Val	Asp	Pro	Val	
107						85			90			95					
109	Asn	Phe	Lys	Leu	Ser	His	Cys	Leu	Leu	Val	Thr	Leu	Ala	Ala	His		
110						100			105			110					
112	Leu	Pro	Ala	Glu	Phe	Thr	Pro	Ala	Val	His	Ala	Ser	Leu	Asp	Lys	Phe	
113						115			120			125					
115	Leu	Ala	Ser	Val	Ser	Thr	Val	Leu	Thr	Ser	Lys	Tyr	Arg				
116						130			135			140					
119	(2)	INFORMATION FOR SEQ ID NO: 3:															
121	(i)	SEQUENCE CHARACTERISTICS:															
122	(A)	LENGTH: 438 base pairs															
123	(B)	TYPE: nucleic acid															
124	(C)	STRANDEDNESS: single															
125	(D)	TOPOLOGY: linear															
127	(iii)	MOLECULE TYPE: DNA (cDNA)															
129	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 3:															
131	GTGACCTGTA	CTCTCTGAGGA	GAAGTCTGCC	GTACTGCC	TGTGGGCCAA	GGTGAACGTG	60										
133	GATGAAGTTG	GTGGTGGAGGC	CCTGGCAGG	CTGCTGGTGG	TCTACCTTTG	GACCCAGAGG	120										
135	TTCCTTGAGGT	CTTTTGCGGG	TCTGTCACACT	CCCTGATGCTG	TTATGGCCAA	CCCTAAAGGTG	180										
137	AAGGCTCATG	GCAAGAAAGT	GCTCGTGC	TTTAGTGTGATG	GCTCTGGCTCA	CCTGGACAC	240										
139	CTCAAGGGCA	CTTTGCGGCA	ACTGAGTGTGAG	CTGCACTGTG	ACAAGCTGCA	CGTGGATCCT	300										
141	GAGAACCTCA	GGCTGCTGGG	CAACAGTGTG	GTCTGTGTG	TGGCCCATCA	CTTTGGCAA	360										
143	GAATTCAACC	CCCCAGTGC	GGCTGCCAT	CAGAAAGTGTG	TGGCTGGTGT	GGCTAATGCC	420										
145	CTGGCCCAAC	AGTATCAC					438										
148	(2)	INFORMATION FOR SEQ ID NO: 4:															
150	(i)	SEQUENCE CHARACTERISTICS:															

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151 (A) LENGTH: 146 amino acids
 152 (B) TYPE: amino acid
 153 (C) STRANDEDNESS:
 154 (D) TOPOLOGY: linear
 155 (ii) MOLECULE TYPE: peptide
 156 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
 157 Val His Leu Thr Pro Glu Glu Lys Ser Ala Val Thr Ala Leu Trp Gly
 158 1 5 10 15
 159 Lys Val Asn Val Asp Glu Val Gly Gly Glu Ala Leu Gly Arg Leu Leu
 160 20 25 30
 161 Val Val Tyr Pro Trp Thr Gln Arg Phe Phe Glu Ser Phe Gly Asp Leu
 162 35 40 45
 163 Ser Thr Pro Asp Ala Val Met Gly Asn Pro Lys Val Lys Ala His Gly
 164 50 55 60
 165 Lys Lys Val Leu Gly Ala Phe Ser Asp Gly Leu Ala His Leu Asp Asn
 166 65 70 75 80
 167 Leu Lys Gly Thr Phe Ala Thr Leu Ser Glu Leu His Cys Asp Lys Leu
 168 85 90 95
 169 His Val Asp Pro Glu Asn Phe Arg Leu Gly Asn Val Leu Val Cys
 170 100 105 110
 171 Val Leu Ala His His Phe Gly Lys Glu Phe Thr Pro Pro Val Gln Ala
 172 115 120 125
 173 Ala Tyr Gln Lys Val Val Ala Gly Val Ala Asn Ala Leu Ala His Lys
 174 130 135 140
 175 Tyr His
 176 145
 177 (2) INFORMATION FOR SEQ ID NO: 5:
 178 (i) SEQUENCE CHARACTERISTICS:
 179 (A) LENGTH: 141 amino acids
 180 (B) TYPE: amino acid
 181 (C) STRANDEDNESS:
 182 (D) TOPOLOGY: linear
 183 (ii) MOLECULE TYPE: peptide
 184 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
 185 Val Leu Ser Gly Glu Asp Lys Ser Asn Ile Lys Ala Ala Trp Gly Lys
 186 1 5 10 15
 187 Ile Gly Gly His Gly Ala Glu Tyr Gly Ala Glu Ala Leu Glu Arg Met
 188 20 25 30
 189 Phe Ala Ser Phe Pro Thr Thr Lys Thr Tyr Phe Pro His Phe Asp Val
 190 35 40 45
 191 Ser His Gly Ser Ala Gln Val Lys Gly His Gly Lys Lys Val Ala Asp
 192 50 55 60
 193 Ala Leu Ala Ser Ala Ala Gly His Leu Asp Asp Leu Pro Gly Ala Leu
 194 65 70 75 80
 195 Ser Ala Leu Ser Asp Leu His Ala His Lys Leu Arg Val Asp Pro Val
 196 85 90 95
 197 Asn Phe Lys Leu Leu Ser His Cys Leu Leu Val Thr Leu Ala Ser His
 198 100 105 110
 199 His Pro Ala Asp Phe Thr Pro Ala Val His Ala Ser Leu Asp Lys Phe

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225 115 120 125
227 Leu Ala Ser Val Ser Thr Val Leu Thr Ser Lys Tyr Arg
228 130 135 140
231 (2) INFORMATION FOR SEQ ID NO: 6:
233 (i) SEQUENCE CHARACTERISTICS:
234 (A) LENGTH: 146 amino acids
235 (B) TYPE: amino acid
236 (C) STRANDEDNESS:
237 (D) TOPOLOGY: linear
239 (ii) MOLECULE TYPE: peptide
241 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
243 Val His Leu Thr Asp Ala Glu Lys Ala Ala Val Ser Cys Leu Trp Gly
244 1 5 10 15
246 Lys Val Asn Ser Asp Glu Val Gly Gly Glu Ala Leu Gly Arg Leu Leu
247 20 25 30
249 Val Val Tyr Pro Trp Thr Gln Arg Tyr Phe Asp Ser Phe Gly Asp Leu
250 35 40 45
252 Ser Ser Ala Ser Ala Ile Met Gly Asn Ala Lys Val Lys Ala His Gly
253 50 55 60
255 Lys Lys Val Ile Thr Ala Phe Asn Asp Gly Leu Asn His Leu Asp Ser
256 65 70 75 80
258 Leu Lys Gly Thr Phe Ala Ser Leu Ser Glu Leu His Cys Asp Lys Leu
259 85 90 95
261 His Val Asp Pro Glu Asn Phe Arg Leu Leu Gly Asn Met Ile Val Ile
262 100 105 110
264 Val Leu Gly His His Leu Gly Lys Asp Phe Thr Pro Ala Ala Gln Ala
265 115 120 125
267 Ala Phe Gln Lys Val Val Ala Gly Val Ala Thr Ala Leu Ala His Lys
268 130 135 140
270 Tyr His
271 145
274 (2) INFORMATION FOR SEQ ID NO: 7:
276 (i) SEQUENCE CHARACTERISTICS:
277 (A) LENGTH: 141 amino acids
278 (B) TYPE: amino acid
279 (C) STRANDEDNESS:
280 (D) TOPOLOGY: linear
282 (iii) MOLECULE TYPE: peptide
284 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
286 Val Leu Ser Ala Ala Asp Lys Ala Asn Val Lys Ala Ala Trp Gly Lys
287 1 5 10 15
289 Val Gly Gly Gln Ala Gly Ala His Gly Ala Glu Ala Leu Glu Arg Met
290 20 25 30
292 Phe Leu Gly Phe Pro Thr Thr Lys Thr Tyr Phe Pro His Phe Asn Leu
293 35 40 45
295 Ser His Gly Ser Asp Gln Val Lys Ala His Gly Gln Lys Val Ala Asp
296 50 55 60
298 Ala Leu Thr Lys Ala Val Gly His Leu Asp Asp Leu Pro Gly Ala Leu
299 65 70 75 80

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301 Ser Ala Leu Ser Asp Leu His Ala His Lys Leu Arg Val Asp Pro Val
302 85 90 95
304 Asn Phe Lys Leu Leu Ser His Cys Leu Leu Val Thr Leu Ala Ala His
305 100 105 110
307 His Pro Asp Asp Phe Asn Pro Ser Val His Ala Ser Leu Asp Lys Phe
308 115 120 125
310 Leu Ala Asn Val Ser Thr Val Leu Thr Ser Lys Tyr Arg
311 130 135 140
314 (2) INFORMATION FOR SEQ ID NO: 8:
316 (i) SEQUENCE CHARACTERISTICS:
317 (A) LENGTH: 146 amino acids
318 (B) TYPE: amino acid
319 (C) STRANDEDNESS:
320 (D) TOPOLOGY: linear
322 (ii) MOLECULE TYPE: peptide
324 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
326 Val His Leu Ser Ala Glu Glu Lys Glu Ala Val Leu Gly Leu Trp Gly
327 1 5 10 15
329 Lys Val Asn Val Asp Glu Val Gly Gly Glu Ala Leu Gly Arg Leu Leu
330 20 25 30
332 Val Val Tyr Pro Trp Thr Gln Arg Phe Phe Glu Ser Phe Gly Asp Leu
333 35 40 45
335 Ser Asn Ala Asp Ala Val Met Gly Asn Pro Lys Val Lys Ala His Gly
336 50 55 60
338 Lys Lys Val Leu Gln Ser Phe Ser Asp Gly Leu Lys His Leu Asp Asn
339 65 70 75 80
341 Leu Lys Gly Thr Phe Ala Lys Leu Ser Glu Leu His Cys Asp Gln Leu
342 85 90 95
344 His Val Asp Pro Glu Asn Phe Arg Leu Leu Gly Asn Val Ile Val Val
345 100 105 110
347 Val Leu Ala Arg Arg Leu Gly His Asp Phe Asn Pro Asp Val Gln Ala
348 115 120 125
350 Ala Phe Gln Lys Val Val Ala Gly Val Ala Asn Ala Leu Ala His Lys
351 130 135 140
353 Tyr His
354 145
356 (2) INFORMATION FOR SEQ ID NO: 9:
358 (i) SEQUENCE CHARACTERISTICS:
359 (A) LENGTH: 23 amino acids
360 (B) TYPE: amino acid
361 (C) STRANDEDNESS:
362 (D) TOPOLOGY: linear
364 (iii) MOLECULE TYPE: peptide
366 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
368 Val His Leu Ser Ala Glu Glu Lys Glu Ala Val Leu Gly Leu Trp Gly
369 1 5 10 15
371 Lys Val Asn Val Asp Glu Val
372 20
375 (2) INFORMATION FOR SEQ ID NO: 10:

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/839,164

DATE: 01/22/2002

TIME: 17:02:43

Input Set : A:\09839164.txt

Output Set: N:\CRF3\01222002\I839164.raw

L:29 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:30 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]